potential benefits of a yearly physical examination are obvious.

Until a technique of greater accuracy and logistic simplicity becomes available, annual Pap tests should be recommended in all but clearly low-risk women.

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## Use of Glucocorticoids in Promoting Fetal Lung Maturation

DESPITE SIGNIFICANT ADVANCES in neonatal intensive care, the respiratory distress syndrome (RDS) in prematurely delivered infants is still associated with a high degree of morbidity and mortality. In an attempt to reduce the incidence and severity of RDS, the maternal administration of glucocorticoids 24 to 48 hours before the delivery of a premature infant has become part of our medical armamentarium.

The fetal lung is reported to be rich in glucocorticoid receptors. Glucocorticoids apparently cause cytodifferentiation of type II pneumocytes and stimulate the production and release of surfactant by induction of the enzyme phosphoryl choline transferase. The end point being an increase in the lecithin:sphingomyelin (L:S) ratio indicating pulmonic maturity.

The original indication for the use of glucocorticoids was in a patient in premature labor, with intact membranes. This indication has been broadened to include those patients with ruptured membranes and without evidence of infection. Most studies have failed to show any statistically significant increase in maternal or neonatal infections with the use of glucocorticoids in patients with premature rupture of membranes.

Obstetricians have been cautioned against the use of glucocorticoids to promote pulmonic maturity in pregnant women with severe hypertension because of a reported increase in antepartum fetal deaths. Steroid induced compromise of an already compromised placenta is the purported mechanism of action. However, others have shown that under controlled conditions, glucocorticoid therapy need not be an absolute contraindication in the hypertensive pregnant patient.

Concern has also been expressed as to whether the use of glucocorticoids could adversely affect the developing fetus or neonate. Studies in animals have shown an inhibition in growth and brain development; a reduction in the absolute number of circulating B and T cells, as well as neonatal adrenal insufficiency. Again, evidence for these comes mostly from studies in animals.

Whether betamethasone or dexamethasone is used is not important except perhaps that the latter has been reported to have increased binding to fetal lung receptors. What is important is that glucocorticoids have been shown to be effective in accelerating pulmonary maturity only in infants born at or before 32 weeks of gestation. The use of steroids after 32 weeks has not influenced the L:S ratio. Also, glucocorticoid therapy offers no protection when given less than 24 hours before delivery.

The role of glucocorticoids in accelerating lung maturity has been firmly established. However, what remains to be determined is whether the potential risks outweigh the intended benefit. Steroid therapy requires care and discretion and should be accompanied by adequate follow-up to study any possible adverse effects.

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## A Second-Look Operation in the Management of Patients With Carcinoma of the Ovary

MUCH OF THE CONFUSION caused by the concept of a second-look laparotomy relates to the lack of a consistent definition. Second operations in patients with ovarian carcinoma are frequent and usually are related to therapy. These include, for example, surgical relief of intestinal obstruction as well as second attempts at tumor reduction. The term second-look laparotomy, however, should be reserved for those instances in which the procedure is carried out on a patient undergoing chemotherapy who appears clinically to be free of disease. The purpose of the operation is to document the patient's disease-free status, so that chemotherapy can be discontinued. The reported increased incidence of acute nonlymphocytic leukemia in patients on prolonged alkylating-agent therapy has precipitated interest in this procedure.

The second-look operation is far from a simple